

Technical drawing of a circular pile cap. The cap is shown in cross-section, revealing a 90-degree cone of PPE or flange O.D. + 1/2". The cap is 8" MIN. thick and has a 3/4" R. (TYP.) and 3/4" CHAMFER (TYP.). It is reinforced with #4 REBAR @ 12" EACH FACE. The cap is supported by a base with dimensions F, G, and H. A 1/4" MIN. HARD RUBBER MATERIAL layer is shown on the top surface, with a 1/4" dimension and a (TYP.) note. The cap is labeled "C" PLATE.

FRONT VIEW

"1/2" DIAMETER CADMIUM PLATED ANCHOR BOLTS W/TWO (2) HEX NUTS FOR LEVELING AFTER INSTALLATION. (TYP. OF 4)

NON-SHRINK GROUT

CONCRETE PIER - 3000 P.S.I. @ 28 DAYS

4"

E

A

B

3-1/2"

12 MIN. BELOW GRADE

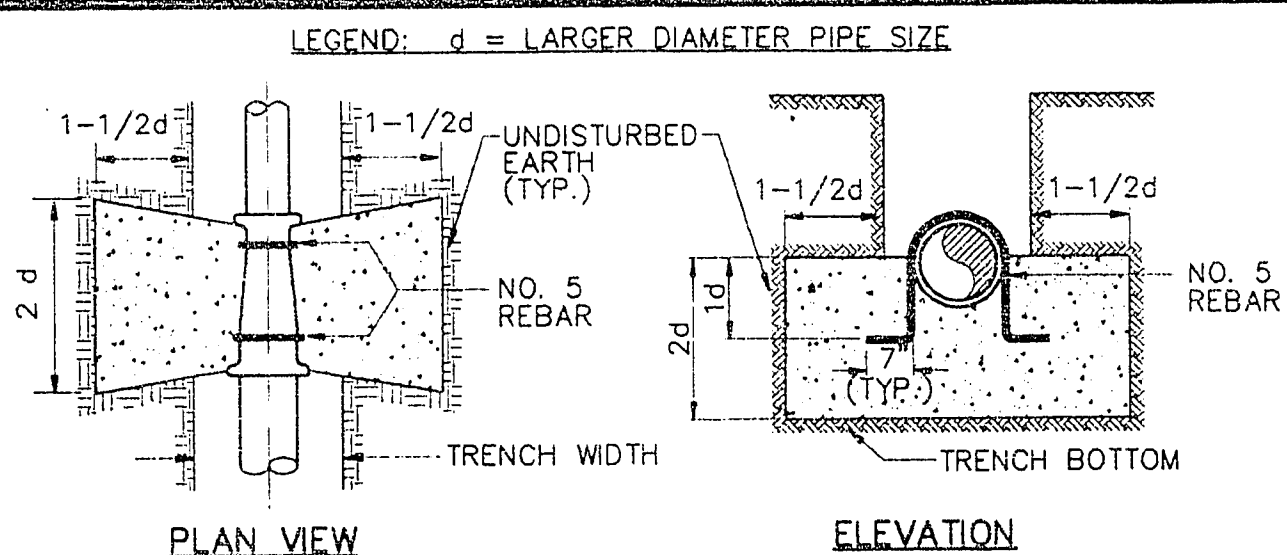
SIDE VIEW

NOTES:

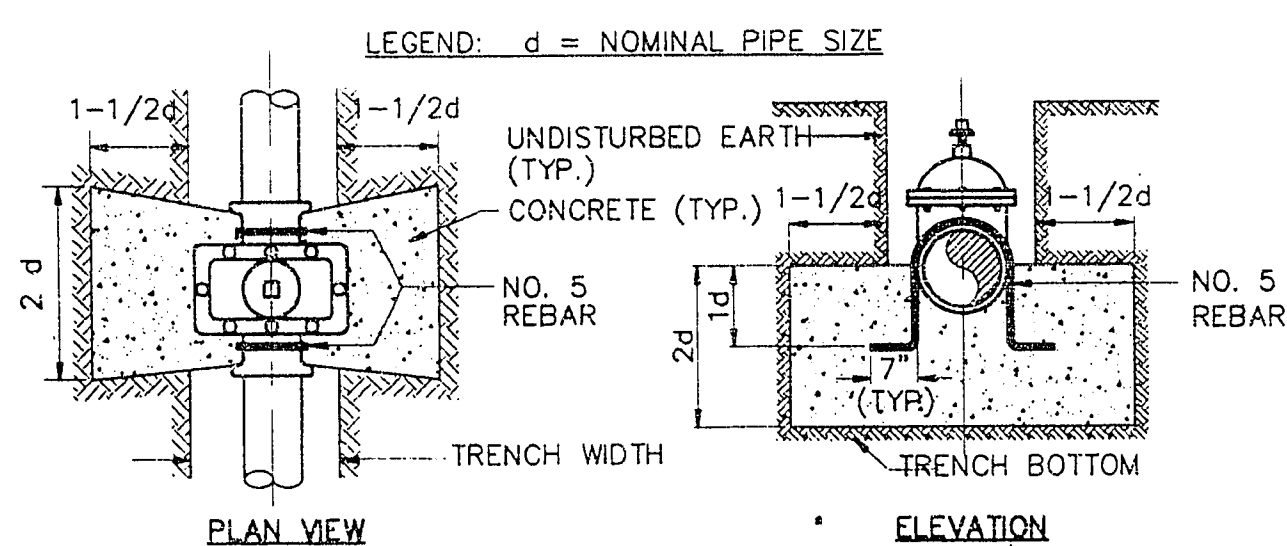
1. GALVANIZED ASSEMBLY AFTER FABRICATION
2. PIPE SUPPORTS TO BE LOCATED IN PIPING PLAN
3. FOR DIMENSIONS SEE TABLE BELOW

DIMENSIONS IN INCHES											
NOMINAL PIPE SIZE						SUPPORTING					
						PIPE			FLANGE		
	A	B	C	D	E	F	G	H	F	G	H
6"	4"	12"	3/8"	5/8"	6"	4"	6"	12"	6"	9"	15"
8"	4"	12"	3/8"	5/8"	6"	5"	8"	14"	6"	11"	17"
10"	4"	12"	3/8"	5/8"	6"	6"	9"	15"	7"	13"	19"
12"	4"	12"	3/8"	5/8"	6"	7"	11"	17"	9"	15"	21"
14"	4"	12"	3/8"	5/8"	6"	8"	12"	18"	9"	16"	22"
16"	4"	12"	3/8"	5/8"	6"	9"	13"	19"	9"	18"	22"

PIPE SUPPORT
NOT TO SCALE



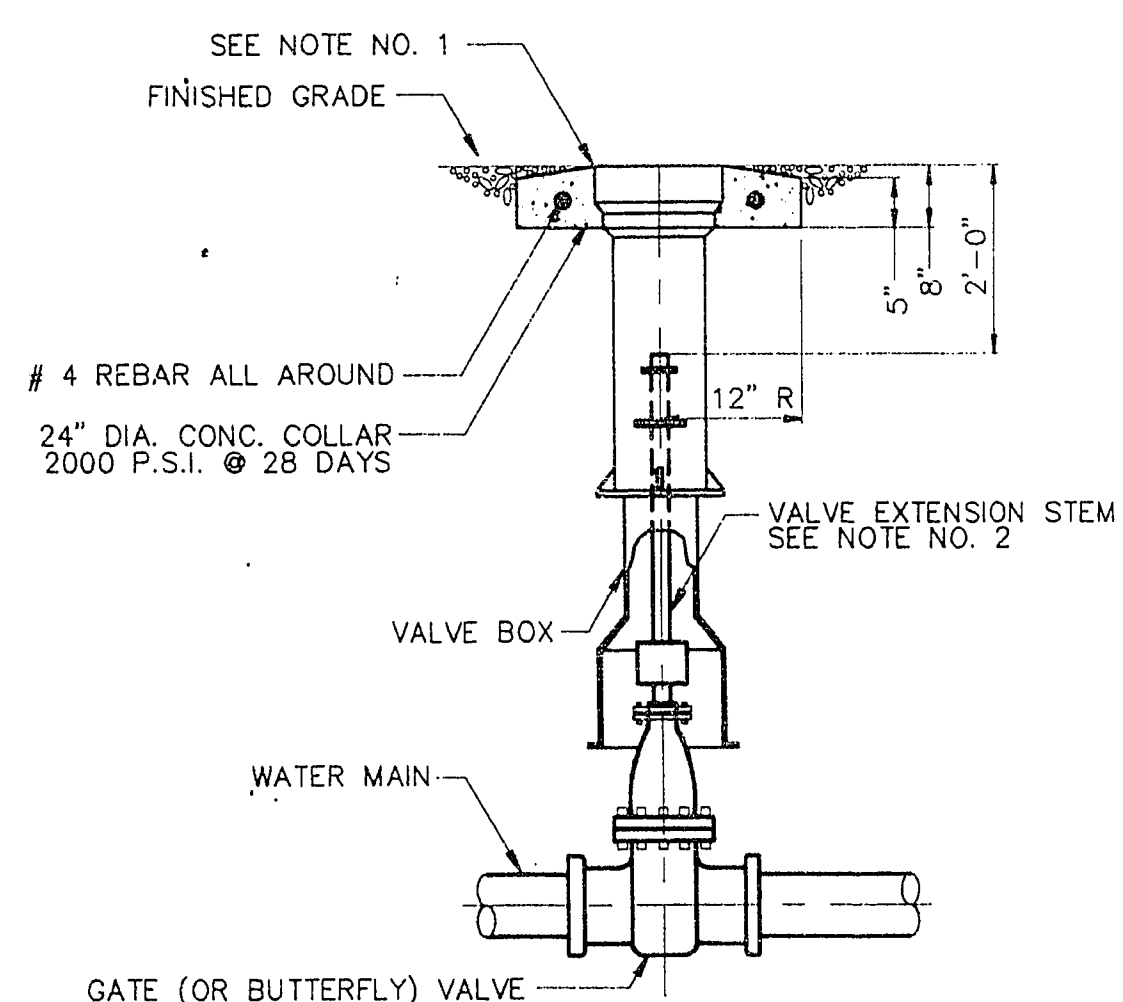
REDUCERS



GATE VALVES

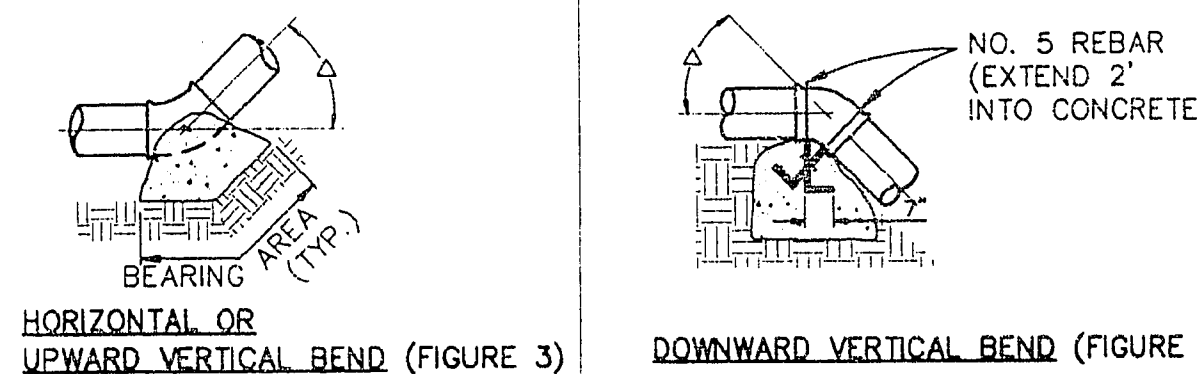
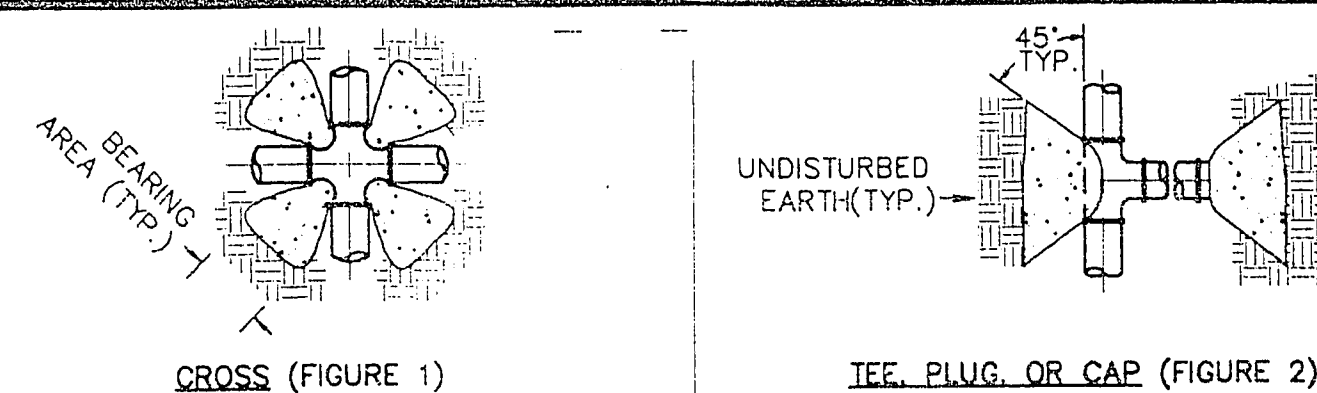
NOTES:
ALL CONCRETE SHALL BE 3000 P.S.I. MINIMUM 28 DAYS STRENGTH
ALL VALVES AND EXPOSED REBAR TO BE COATED AND WRAPPED IN
ACCORDANCE WITH SECTION 3, PROTECTIVE COATINGS.

ANCHOR BLOCK
NOT TO SCALE



NOTES:
CONCRETE TO BE 1/8" TO 1/4"
BELOW FINISHED GRADE
A VALVE EXTENSION STEM SHALL BE PROVIDED
WHERE THE DEPTH TO THE OPERATING NUT
EXCEEDS FIVE (5) FEET.

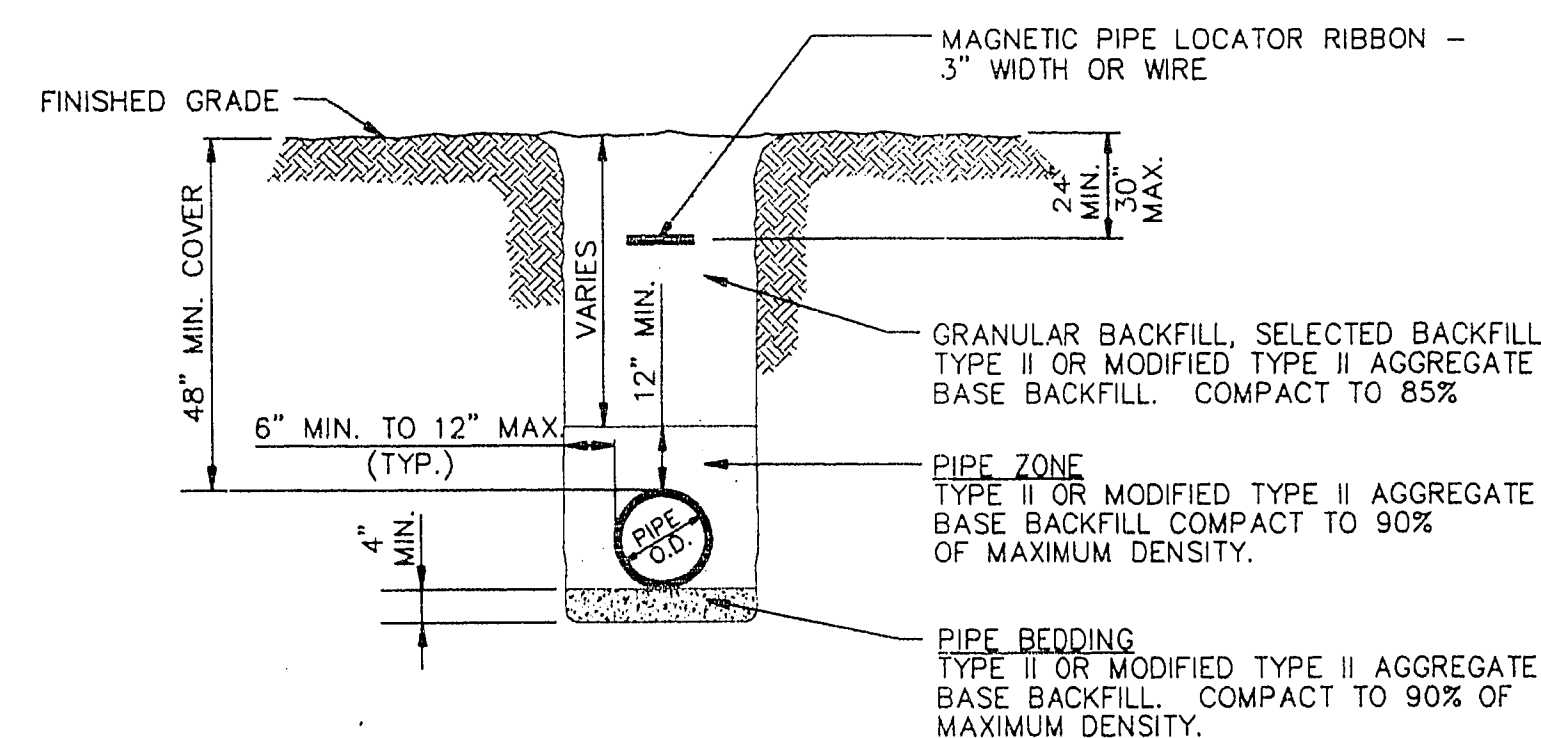
VALVE BOX INSTALLATION



GENERAL NOTES:
COAT AND WRAP ALL METAL SURFACE IN ACCORDANCE WITH SECTION 3, PROTECTIVE COATINGS.
ALL CONCRETE SHALL BE 2000 P.S.I. MINIMUM, 28 - DAYS COMPRESSIVE STRENGTH. CONCRETE
IS TO BE PLACED IN UNDISTURBED EARTH. TABLE BELOW DENOTES MINIMUM BEARING AREA OR
VOLUME OF THRUST BLOCK. SPECIAL DESIGN, BY A NPPE, FOR EACH INSTALLATION IS REQUIRED
IF ALLOWABLE SOIL BEARING CAPACITY IS LESS THAN 3000 P.S.F. ALL VERTICAL SURFACES NOT
BEARING AGAINST UNDISTURBED EARTH SHALL BE FORMED.

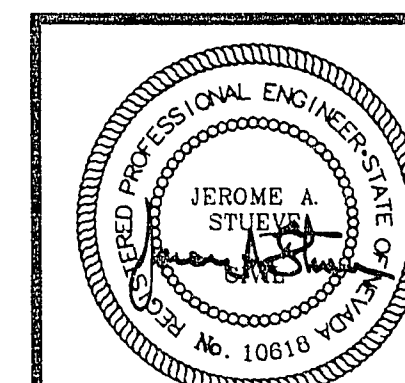
		BEARING AREA IN SQUARE FEET						CONC./CU.YDS.		
PIPE I.D.	FIGURE 1	FIGURE 2	FIGURE 3, Δ				FIGURE 4, Δ			
			90°	45°	22½°	11¼°	45°	22½°	11¼°	
4"	2	2	2	1	1	1	1.0	0.5	0.5	
6"	2	3	4	2	1	1	1.5	1.0	0.5	
8"	3	5	7	4	2	1	2.5	1.5	1.0	
10"	4	8	10	6	3	1	4.0	2.5	1.5	
12"	5	10	14	8	4	2	5.0	3.0	1.5	
16"	10	20	24	12	7	4	8.5	4.5	2.5	
18"	12	24	30	16	10	5	11.0	6.0	3.0	
20"	14	28	40	20	12	6	14.0	8.0	4.0	

THRUST BLOCK
NOT TO SCALE



NOTE: 1. CENTER PIPE LOCATOR RIBBON OR WIRE IN TRENCH AND PLACE OVER ENTIRE LENGTH OF ALL TYPES, SIZES AND LOCATIONS OF WATER MAINS.

TRENCH BACKFILL
NOT TO SCALE



7-12-99

DRAWING NUMBER
738

REF. SHEET NO. C12
SHEET 12 OF 31

LAS VEGAS VALLEY WATER DISTRICT
1001 SOUTH VALLEY VIEW BOULEVARD
LAS VEGAS, NEVADA 89153

EQUIP WELL NOS. 101 AND 103

STANDARD DETAILS 565-269